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(54) Title: METHODS, SYSTEMS, AND SOFTWARE FOR PREDICTING BIOCHEMICAL NETWORKS OR PATHWAYS

(57) Abstract: The present invention provides methods for predicting biochemical networks or pathways. Related systems and software are also provided.



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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/23566

## A. CLASSIFICATION OF SUBJECT MATTER

IPC: G01N 33/48( 2006.01)

USPC: 702/19,20

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
U.S. : 702/19, 20

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
STN and EAST

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X — A	SIRAVA et al. BioMiner - Modeling, Analyzing, and Visualizing Biochemical Pathways and Networks. Bioinformatics. 2002, Vol. 18, Suppl. 2, pages s219-s230, entire document especially pages s219-s225.	1 ----- 2-18
A	OVERBEEK et al. WIT: Integrated System for High-throuput Genome Sequence Analysis and Metabolic Reconstruction. Nucleic Acids Research. 2002, Vol. 28, No. 1, pages 123-125, entire document.	1-18
A	GAASTERLAND et al. Fully Automated Genome Analysis that Reflects User Needs and Preferences, a Detailed Introduction to the MAGPIE System Architecture. Biochimie. 1996, Vol. 78, pages 302-310, entire document.	1-18
A	GOESMANN et al. Pathfinder: Reconstruction and Dynamic Visualization of Metabolic Pathways. Bioinformatics. 2002, Vol. 18, No. 1, pages 124-129, entire document.	1-18

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
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**INTERNATIONAL SEARCH REPORT**International application No.  
PCT/US04/23566**C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	RODIN et al. A Rapid Heuristic Algorithm for Finding Minimum Evolution Trees. Molecular Phylogenetics and Evolution. 2000, Vol. 16, No. 2, pages 173-179, entire document.	1-18